Selective Monoamine Reuptake Inhibitor Surveillance Program

PURPOSE

This program is intended to provide surveillance of the performance of Army aviation personnel with specific psychiatric diagnoses successfully treated with Selected Serotonin Reuptake Inhibitors (SSRIs). Closely related medications such as Selected Norepinephrine Reuptake Inhibitors (SNRIs) with similar efficacy and minimal side effect profiles (e.g., bupropion, venlafaxine) will also be included, and hence the more inclusive class will be referred to as Selective Monoamine Reuptake Inhibitors. This surveillance program seeks to evaluate the performance of aviation personnel using these medications under proper aeromedical supervision and to advise the Surgeon General on issues related to mental health in the aviation environment.

BACKGROUND

The prevalence of depression in aircrew is estimated to be about 6%, similar to the general population (Schneider, et al, unpublished data). Cross-sectional surveys have shown the anxiety disorders to be even more prevalent in the general population, even though depression is seen more frequently in clinical settings. The prospect of being grounded for an extended period inevitably leads many to forego treatment and suffer in silence, to seek medical care at their own expense to avoid reporting to aeromedical authorities, or to use herbal remedies and antidepressant medications obtained via the Internet without proper psychiatric or aeromedical supervision.

This risk to aviation safety must be weighed against the potential use of newer psychotropic medications with well-established records of efficacy and minimal side effect profiles. Previous antidepressant medications generally had side effects quite incompatible with flying duties, including fatigue, drowsiness, and marked anticholinergic effects. In the past decade, increasing experience has been gained with this new generation of antidepressants whose effect is to modulate the intracellular action of neurotransmitters in various parts of the brain whose imbalance is thought to be a causative factor in anxiety and depression. There is an increasing consensus of medical opinion that it is possible to allow the use of these medications in aircrew in circumstances that would not compromise flight safety or operational effectiveness, and would allow the preservation of trained aircrew resources.

There is also widespread recognition that medical personnel sometimes collude with patients and choose diagnoses or treatments to avoid administrative requirements. This may lead to inappropriate diagnosis (e.g., diagnosing adjustment disorder when depression is more appropriate to avoid grounding, or using bupropion under the pretext of smoking cessation in order to treat depression). Efforts to avoid prolonged grounding may also contribute to undertreatment, avoiding the use of medications and thereby adding to morbidity, which may paradoxically extend the time required before return to aviation duties is possible. There is often considerable overlap between the clinical syndromes of depression and anxiety, leading to comorbid diagnoses and similar

treatments, with SSRIs currently the mainstay of treatment for both. To avoid encouraging the misdiagnosis of anxiety disorders as depression by excluding them from this protocol, the less severe anxiety disorders will be addressed as well.

All of the medications in this class have similar efficacy. They also have similar side effect profiles, including potential discontinuation symptoms, but may vary somewhat in the relative frequency of these side effects. Adverse effects tend to occur early in treatment and diminish as the patient becomes physiologically accustomed to the medication. This individual variability obviates the need to specify a preference for approval of one medication over another, especially since personnel will be required to be demonstrably free of symptoms or neurocognitive side effects. The most common side effect with prolonged treatment is sexual dysfunction, which may not be aeromedically significant but may lead to cessation or alteration of therapy. SSRI-induced sexual dysfunction may be managed by switching to or augmentation with another agent (most commonly bupropion). Changing dosage or discontinuation of medication requires temporary grounding and close monitoring for aeromedically significant symptoms.

SCOPE

This protocol is governed by the APLs on Anxiety and Mood Disorders and will be applied to personnel designated by the APLs. Specific diagnoses to be included are Major Depressive Disorder, Dysthymia, Depressive Disorder NOS, Posttraumatic Stress Disorder, Acute Stress Disorder, Generalized Anxiety Disorder, and Anxiety Disorder NOS. Treatment must be limited to a single agent in this class that has been approved by the FDA for treatment of depression or anxiety for at least three years with favorable post-marketing surveillance. The only exception to monotherapy may be the addition of bupropion to a therapeutic dose of an SSRI for the management of medication-related sexual dysfunction.

RESPONSIBILITIES

Flight Surgeons: Flight Surgeons initiate requests for entry into the surveillance program (see procedures below). Flight Surgeons ensure aviation personnel who have a waiver under the Anxiety and Mood Disorder APLs complete all required evaluations during the course of their career.

US Army Aeromedical Activity (USAAMA): USAAMA provides oversight of the surveillance program to include management of waiver requests and data management.

PROCEDURES:

Trained aviation personnel (Classes 2, 2F, 3, and 4): As specified in the APL, trained aviation personnel will enter the surveillance program by submitting required clinical information through their Flight Surgeon to USAAMA. The following information must be included:

(1) Detailed clinical interview by an aeromedically-trained psychiatrist or psychologist (or suitable alternative approved by the ACAP Aviation Psychiatry Consultant). This must include target symptoms, medication history, specific diagnostic conclusions supporting one of the included diagnoses listed above, and corroboration of the information provided by the treating psychiatrist.

(2) Narrative summary or treatment records from the treating psychiatrist or prescribing physician. This must include documentation of uncomplicated illness without evidence of psychosis or suicidal behavior, medication trials and titration to therapeutic effect, and the absence of aeromedically significant symptoms or side effects without change in dosage (continuation phase of treatment) for a period of at least four months. This documentation must be made available to the aeromedical psychiatrist (if not the treating psychiatrist), preferably before the initial interview.

(3) Neuropsychological assessment to include cognitive domains and motor skills testing (e.g., Cog Screen) to demonstrate functional ability.

(4) Operational assessment and command endorsement to demonstrate aeronautical ability. For Class 2 personnel, this must include an in-flight performance evaluation in either an aircraft (preferred) or a simulator. The in-flight performance evaluation must be the identical to the annual A-Part evaluation and performed by an IP or SIP from another unit who is unaware of the reason for the in-flight evaluation (a blinded evaluation).

A USAAMA panel of neuropsychological experts will review the information provided and forward to the USAAMA director with a recommendation for or against waiver and for entry into the AEDR. The USAAMA director will review and inform the applicant's Flight Surgeon of required actions.

New accessions to Flight Surgeon/Aeromedical Physician Assistant (Class 2F), Nonrated Aircrew (Class 3), or ATC (Class 4): Same as above.

WAIVER

If a waiver is granted, aviation personnel will be required to follow-up with their treating psychiatrist as recommended in accordance with their clinical condition. They will also be required to undergo evaluation by an aeromedically-trained psychiatrist every 6 months for the duration of treatment plus six months.